AMENDMENTS TO THE CLAIMS

- 1. (Previously Presented) An apparatus comprising:
 - a flow manager;
 - a remote logical port (RLP) model to model a remote physical port (RPP); and
- a trunk scheduler to schedule transmission units directed to the remote physical

port.

- 2. (Original) The apparatus of claim 1 wherein the flow manager comprises:
 - a flow shaper; and
 - a flow parameter database.
- 3. (Original) The apparatus of claim 1 wherein the flow manager comprises:
 - an RLP scheduler; and
 - a flow parameter database.
- 4. (Original) The apparatus of claim 2 wherein the flow manager further comprises:
 - an RLP scheduler.
- 5. (Original) The apparatus of claim 1 wherein the RLP model comprises: an RLP data structure to hold data indicating characteristics of the RPP; and an RLP traffic shaper to make a transmission unit eligible consistent with the characteristics of the RPP.
- 6. (Original) The apparatus of claim 4 wherein the flow manager comprises a plurality of queues, one queue for each flow directed toward the RPP.

- 7. (Original) The apparatus of claim 6 wherein shaping and scheduling are performed by manipulating pointers to the queues.
- 8. (Original) The apparatus of claim 1 wherein the trunk scheduler statistically multiplexes an aggregate of the flows directed to a plurality of RPPs.
- 9. (Original) The apparatus of claim 1 wherein the trunk scheduler operates in a weighted round robin non-work conserving manner.
- 10. (Original) The apparatus of claim 1 further comprising one of an OC-3 port and a DS-3 port.
- 11. (Original) A system comprising:
 - a broadband communication link;
- a demultiplexer coupled to a plurality of physical ports and the broadband communication link; and
- a network element coupled to the communication link the network element modeling the plurality of physical ports and providing a two-tier hierarchy of shaping and scheduling of flows directed to the plurality of physical ports.
- 12. (Original) The system of claim 11 wherein the network element comprises: a first flow shaper to shape a plurality of flows directed to a remote physical port (RRP);
- a first scheduler to schedule the flows shaped by the first flow shaper to yield a scheduled flow;
 - a second flow shaper to shape the scheduled flow; and
- a trunk scheduler to schedule the flow shaped by the second flow shaper for transmission to the RPP.

- 13. (Original) The system of claim 11 further comprising: a plurality of data structures populated with data indicating characteristics of a remote physical port (RRP); and a database populated with flow parameters.
- 14. (Original) The system of claim 13 wherein a one-to-one correspondence exists between RLP data structures and RPPs.
- 15. (Original) The system of claim 12 wherein the network element comprises: a queue for each flow directed at a physical port and wherein shaping and scheduling are performed by pointer manipulation.
- 16. (Original) A method comprising: modeling a plurality of remote physical ports (RPP) as a plurality of remote logical ports (RLP); and reflecting quality of service from a control aggregator to the plurality of RPPs.
- 17. (Original) The method of claim 16 wherein reflecting comprises:
 shaping a plurality of flows directed to a RPP into a plurality of shaped flows:
 scheduling the shaped flow into a scheduled flow;
 shaping the scheduled flow into a shaped scheduled flow; and
 scheduling the shaped scheduled for transmission to the RPP.
- 18. (Original) The method of claim 16 wherein modeling comprises: populating a database with an entry indicating an ability of an RPP to handle data.
- 19. (Original) The method of claim 18 wherein modeling further comprises:

creating a data structure for each flow directed to a remote physical port; and manipulating the data structure to indicate eligibility of a transmission unit consistent with the ability of the RPP to handle data.

- 20. (Original) The method of claim 16 further comprising: statistically multiplexing the flows from the plurality of RLPs to the plurality of RPPs.
- 21. (Original) The method of claim 16 wherein a one-to-one correspondence exists between the RLPs and the RPPs.

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